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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/771,653

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EXAMINER

GEE, JASON KAI YIN

ART UNIT

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2134

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/771,653	Applicant(s) BRUMME ET AL.	
	Examiner JASON K. GEE	Art Unit 2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/28/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/26/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is response to communication: response to restriction/election received 12/28/2007, with acknowledgement of filing date of 02/03/2004.
2. Claims 1-16 are current pending in this application. Claims 17-46 have been withdrawn.
3. The IDS received 05/26/2004 has been accepted.
4. Claims 1-16 have been elected by applicant without traverse. Claims 17-46 have been withdrawn.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 16, the claim recites forming a response to the call. However, there is no antecedent basis for a call being made initially.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-5, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wehrend et al. US Patent No. 6,614,782 (hereinafter Wehrend), and in view of Bromley et al. US patent No. 7,266,677 (hereinafter Bromley).

As per claim 1, Wehrend teaches an apparatus comprising means for operating first and second assemblies and making a call for access by the first assembly to the second assembly (col. 7 lines 45 to col. 8 line 26); means, based upon an identification (ID) for at least one of the first and second assemblies, for determining access privileges of the first assembly to the second assembly (col. 9 lines 40-65).

However at the time of the invention, Wehrend does not explicitly teach virtual machine means in a managed code portion. However, the use of virtual machines and utilizing managed code portions are well known in the art, and is taught by Bromley.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to combine the teachings of Wehrend with Bromley. One of ordinary skill in the art would have been motivated to perform such an addition to allow flexibility in systems, as it allows systems to communicate with each other when they operate in different operating environments (col. 2 lines 21-37). Both the references deal with communications across different networks that utilize assemblies.

As per claim 2, Wehrend teaches wherein the ID is a user ID (col. 9 lines 40-65 and also col. 7 line 45 to col. 8 line 26).

As per claim 3, Bromley teaches an execution engine means, in a native code portion, for the virtual machine means (col. 3 line 60-col. 4 line 4; col. 11 line 52 to col.

12 line 15; col. 12 line 35-col. 12 line 52); and means, in a native code portion, for providing an operating system (col. 12 line 45 to col. 13 line 5, wherein operating environment can be operating system, col. 5 lines 35-45).

As per claim 4, Wehrend teaches wherein the means for determining access privileges further comprise: means for preventing the access of the first assembly to the second assembly when the determination based upon the ID for at least one of the first and second assemblies is unfavorable based upon predetermined criteria for the respective IDs (col. 9 lines 50-60).

As per claim 5, Wehrend teaches wherein the means for determining access privileges further comprises: means for preventing the access of the first assembly to the second assembly when the ID for the first assembly does not match the ID for the second assembly based upon a predetermined match criteria for the respective IDs (col. 9 lines 50-65).

As per claim 14, Bromley teaches wherein the execution engine means in the native code portion further comprises a compiler to compile each said assembly into native code for execution by the native code portion (col. 3 lines 60-col. 4 line 4; col. 11 line 52 to col. 12 line 15; col. 12 line 35 to col. 12 line 52).

As per claim 16, as best understood by the Examiner, Bromley teaches means, in the native code portion, for forming a response to the call. , and means for returning the response to the first assembly in the managed code portion (col. 3 lines 60-col. 4 line 4; col. 11 line 52 to col. 12 line 15; col. 12 line 35 to col. 12 line 52). Also, this is taught in Wehrend in col. 7 lines 45 to col. 8 line 25.

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wehrend and Bromley as applied, and further in view of Segarra et al. US Patent No. 4,430,699 (hereinafter Segarra).

As per claim 6, the Wehrend combination teaches preventing access of the first assembly to the second assembly, but does not explicitly teach wherein the rules are based upon application domains. However, this is taught by Segarra, such as in col. 34 lines 30-40.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to combine the Segarra reference with the Wehrend combination. One of ordinary skill in the art would have been motivated to perform such an addition to allow more security options to be available. As multiple systems are communicating with each other, it would be obvious to not allow systems with different application domains to communicate with each other, as it may lead to security problems. Further, Segarra deals with computer networks communicating with one another, and these teachings coincide with the teachings of Wehrend and Bromley.

10. Claims 7 and 15 are rejected under 35 U.S.C. 103(a) as being obvious over Wehrend and Bromley as applied, and further in view of applicant's admitted prior art.

As per claim 7, Wehrend teaches the means for determining access privileges further comprising means for permitting the access of the first assembly to the second assembly when the ID for the first assembly matches the ID for the second assembly

based upon a predetermined match criteria for the respective IDs (col. 9 lines 45-65). Bromley teaches wherein the assemblies from an intermediate language code and meta data are compiled into native code (col. 11 line 53 to col. 12 line 14; col. 12 line 35 to col. 13 line 5). Although metadata is not explicitly taught, it would have been obvious and common sense to compile all necessary information into native code. Bromley teaches that the necessary information is compiled into native code, and thus, it would have been obvious and common sense to convert meta data, if needed, into native code as well if this data needed to be utilized.

However, at the time of the invention, a CLR loader is not taught to load the compiled native code. However, this is inherent, if not obvious to utilize CLR loaders. Bromley teaches the use of .NET throughout the invention, such as in col. 12, and the applicant's admitted prior art teaches that CLR is the heart of the .NET framework in paragraph 3 of the publication (2005/0172133). "CLR is the heart of the Microsoft NET Framework and provides the execution environment for all NET code. Thus, code that is built to make use of the CLR, and that runs within the CLR, is referred to as "managed code." Therefore, as Bromely utilizes .NET throughout in regards to managed code, it would be inherent, if not obvious, to utilize a CLR loader.

Further, Bromely teaches the means for executing the compiled native code in the native code portion, wherein the first assembly accesses the second assembly (col. 12 lines 1-14, and the accessing of assemblies taught in Wehrend col. 9 lines 40-65).

Claim 15 is rejected using the same basis of arguments used to reject claim 7 above. Further, the applicant's admitted art that JIT compilers may be used to compile

code. As Bromley teaches the use of .NET, it would have been obvious to try to use the JIT compilers included in the system, as these are well known in the art.

11. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wehrend and Bromley as applied above, and further in view of Hardman et al. US Patent no. 2004/0059941 (hereinafter Hardman)

As per claim 8, the Bromley combination does not explicitly teach permitting access of the first assembly to the second assembly when a previous said access has been permitted. However, this type of access control is well known in the art, and is illustrated by Hardman in paragraph 51.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hardman with the Wehrend combination. One of ordinary skill in the art would have been motivated to perform such an addition to save time. As a user has already been authenticated once, it would not always be necessary to authenticate the user again once he's been authenticated. This would save time and processing speed. These type of access controls are well known in the art. Further, it teaches in paragraph 10 that it would be beneficial to provide one-time authorization and access to systems.

As per claim 9, Hardman teaches wherein the previous said access had been permitted following a prior said determination that was favorable based upon a predetermined comparison criteria for the respective IDs (paragraph 26).

12. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wehrend and Bromley as applied above, and further in view of Borza US Patent No. 6,076,167 (hereinafter Borza)

As per claim 10, means for compiling at least one of the first and second assemblies into native code is taught by Bromley, such as in col. 12 as described earlier. Further, permitting the means for compiling to compile at least one of the first and second assemblies into native code is taught by Bromley in col. 12 lines 35-col. 13 line 5. However, at the time of the invention, the Bromley combination does not explicitly teach accuracy means, prior to the means for determining access privileges, for determining whether the ID is accurate for the first and second assemblies. However, checking accuracy means before determining privileges and delaying the determination until the ID is accurate is taught in Borza col. 12 lines 45-55.

At the time of the invention, it would have been obvious to implement the ideas taught by Borza with the Wehrend combination. One of ordinary skill in the art would have been motivated to perform such an addition to provide a method for securely transmitting data and for securely transmitting data across a network that is capable of real time modification in order to increase security (col. 2 lines 1-7).

As per claim 11, the combination of Borza with the Bromley combination teaches these limitations of the claims. Wehrend teaches that the assemblies are able to communicate after IDs are checked and accurate. Bromley then teaches that the code is compiled into native code for runtime in col. 12 lines 1-14 and col. 12 lines 40-67. Also shown in col. 13 lines 15-24.

As per claim 12, Borza teaches in col. 12 lines 45-55 that the ID's must be accurate before proceeding to access privileges. Therefore, since access privileges are halted, all other steps subsequently following it must halt as well, which would halt the system before it would run.

13. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wehrend and Bromley as applied above, and further in view of Rompaey et al. US Patent No. 5,870,588 (hereinafter Rompaey).

As per claim 13, the Wehrend and Bromley combination teach the compilers and metadata, as seen in the rejection for claim 7 above. However, the combination does not teach all the limitations of this claim. These limitations are taught by the Rompaey reference, in combination with the Wehrend and Bromley references. Rompaey teaches this, such as in col. 5 lines 28-54.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to combine the references of Rompaey with the Wehrend combination. One of ordinary skill in the art would have been motivated to perform such an addition to provide synthesis tools to allow code to run independently of their design environments. Col. 5 lines 45-55.

Conclusion

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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason K. Gee whose telephone number is (571) 272-6431. The examiner can normally be reached on M-F, 7:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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02/15/2008

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